REMARKS

Status of the Claims

- Claims 1-24 are pending in the Application after entry of this amendment.
- Claims 1-24 are rejected by Examiner.

Claim Rejections Pursuant to 35 U.S.C. §103 (a)

Claims 1-3, 5-6, 10-18, 22 and 23 stand rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,187,786 to Densmore et al. in view of Publication No. US 2004/0111730 A1 to Apte. Applicant respectfully traverses the rejection.

Concerning the above mentioned claims, the Examiner states in the present office action that Densmore et al. does not explicitly teach a level of indirection from application programming interfaces used by a class locator, the wrapper indirection level providing for different caches to be used for the selected elements. Applicant agrees with the Examiner on this point. However, the Applicant respectfully disagrees that Apte teaches the missing limitations.

Apte teaches an adapter that is generated by introspecting on the interfaces of an Enterprise JavaBean (EJB) running on a Common Object Request Broker Architecture (CORBA) server. The adapter resides on the Java client-side and contains a remote proxy of the CORBA server that runs the EJB. The adapter is a Java class that implements the interfaces specified by the EJB for invoking its business methods. Adapters delegate all of the business method calls from the client to the CORBA proxy on the server and perform data marshaling from the Java client to the CORBA proxy and vice versa. Any business method calls made by the client to the adapter are delegated by the adapter to the CORBA proxy after appropriate data conversion. Thus, the adapter acts as transparent glue between the Java client and the EJB on the CORBA server. (Paragraph 0012).

Claim 1 recites in relevant part;

> ...creating a wrapper for selected elements in the class path to provide a level of indirection from application programming interfaces used by a class locator, the wrapper indirection level providing for different caches to be used for the selected elements;
> requesting a search of the class path via the wrapper...

Apte does not disclose creating a wrapper to provide a level of indirection where the wrapper provides for different caches to be used for selected elements. Instead, Apte teaches, with respect to Figure 7A and paragraph 0074, a Java Virtual Machine 702 that comprises an adapter 706 that provides an EJB interface 708 to a client a object 704 so that the client object 704 may call a method in the EJB interface 708 using the known method of remote method invocation. The EJB interface 708 calls a Common Object Request Broker Architecture (CORBA) *proxy* 710 to initiate CORBA *communication with server* 726. CORBA proxy 710 passes an object request to an Object Request Broker (ORB) 714. In this example, ORB 714 is implemented in Java. If the ORB was implemented in C++, then the object request would pass through a Java Native Interface (JNI). ORB 714 and ORB 718 communicate across Internet InterOrb Protocol (IIOP) 716 to ensure that object requests are transparently supported by the client and server objects using the object request broker. Once ORB 718 receives an object request, code within the EJB skeleton 720 is called to begin the invocation of *the requested business method* from EJB 728. EJB skeleton 720 uses JNI 722 to invoke EJB 728 and pass the appropriate arguments to EJB 728 contained within JVM 724. In this particular example, EJB skeleton 720 may be implemented in C++ but could be implemented in another language other than Java that would require the use of JNI 722.

Applicant notes that Claim 1 of the present application is directed to a method of locating classes in a class path and does not contain or require the elements of a Common Object Request Broker Architecture (CORBA), a CORBA proxy, an Object Request Broker (ORB) pair, one of each in a client 700 and an external server 726, a requested business method or an Internet InterOrb Protocol (IIOP) 716. Whereas the invention of Apte involves the use of an adapter to wrap an object reference for a server object (Abstract), Claim 1 creates a wrapper for selected elements in a class path and provides a level of indirection from API's used by a class locator where the level of indirection provides different caches for the selected elements as pat of a method to locate a class in a class path. Applicant notes that Apte does not teach or suggest that a wrapper that provides a level of indirection that provides different caches for selected elements as recited in Claim 1.

Applicants respectfully submit that the combination of Densmore et al. and Apte do not teach or suggest a wrapper to provide a level of indirection from application programming interfaces used by a class locator, the wrapper indirection level providing for

different caches to be used for selected elements as recited in Claim 1. Consequently, neither Densmore et al. nor Apte, either alone or in combination, can render independent Claim 1 obvious because all of the elements of Claim 1 are not present in the cited references.

Similarly, independent Claims 5, 10, 15, 17, 22 and 23 recite elements of a wrapper to provide a level of indirection from application programming interfaces used by a class locator where the wrapper indirection level provides for different caches to be used for selected elements. As mentioned above, neither Densmore et al nor Apte, either alone or in combination teach or suggest these elements in the recited combination.

Applicant therefore respectfully traverses the current 35 U.S.C §103(a) rejection for the above stated reasons and submits that independent Claims 1, 5, 10, 15, 17, 22 and 23 and corresponding dependent Claims 2-4, 6-9, 11-14, 16, 19-21 and 24 are in a condition for allowance.

Currently, Claims 4, 7-9 and 19-21 also stand rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,187,786 to Densmore et al. in view of Publication No. US 2004/0111730 A1 to Apte and in further view of U.S. Publication No. US 2004/0133882 to Angel et al. Applicant respectively traverses the rejection.

Applicants submit that Angel et al. does not disclose a wrapper to provide a level of indirection from application programming interfaces used by a class locator, the wrapper indirection level providing for different caches to be used for selected elements. Applicants note that Claim 4 depends on independent Claim 1, Claims 7-9 depend on independent Claim 5, Claims 19-21 depend on independent Claim 17 and Claims 1, 5 and 17 patentably define over the cited art of the combination of Densmore et al. and Apte as discussed above. Therefore the addition of Angel et al. to the combination of Densmore and Apte does render obvious Claims 1, 5 and 17 or any of their dependent claims.

Accordingly, the Examiner is respectfully requested to reconsider and withdraw all claim rejections under 35 U.S.C. §103(a) for Claims 1-24 for the present application.

Conclusion

Applicant respectfully request reconsideration of the subject application in light of the remarks presented above. A Notice of Allowance for all pending claims is earnestly solicited.

Respectfully Submitted,

Date: June 29, 2005

Jerome G. Schaefer
Registration No. 50,800

Woodcock Washburn LLP
One Liberty Place - 46th Floor
Philadelphia PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439